REMARKS

I. Status of Claims

Claims 1-15 are pending in the application, and all the claims are rejected. Claim 1 is amended to recite that the regeneration step includes immersing the NO_x removal catalyst without ultrasonic treatment. Support is found, for example, at pages 21-22 of the specification, namely, at Comparative Example 2 (where the NO_x removal catalyst was subjected to micro-vibration) and Working Examples 1 and 2 (where the NO_x removal catalyst was simply immersed in under). Claim 9 is amended to recite that the NO_x removal catalyst is installed after removing water from the catalyst. Support is found, for example at the third full paragraph at page 18 of the present specification. No new matter is added.

Entry of the Amendment, review and consideration on the merits are respectfully requested.

II. Response to Claim Rejection Under 35 U.S.C. § 112

The rejection of claims 1-15 under 35 U.S.C. § 112, second paragraph, as being indefinite, was maintained from the Office Action of May 12, 2008. Specifically, the Examiner provides a definition of "dry" from Merriam-Webster's Online Dictionary, asserting that the rejection has merit because the term "drying" is not sufficiently defined in the Specification. Therefore, in the Examiner's opinion, "drying" can be equated with "removing water", according to the dictionary definition of "dry", and the Examiner finds the phrase "removing water... without drying" to be contradictory.

In response, claim 1 is amended to delete the recitation of "without drying the catalyst" and claim 9 is amended to replace the phrase "without drying the catalyst" with "after removing

water from the catalyst." It is respectfully submitted that the claims as amended fully comply with 35 U.S.C. § 112, and withdrawal of the foregoing rejection is respectfully requested.

III. Response to Claim Rejections Under 35 U.S.C. § 103

(i) The rejection of claims 1-11 under 35 U.S.C. § 103(a) as being unpatentable over Dittmer, et al. (U.S. Patent No. 6,241,826), optionally in view of Schneider, et al. (U.S. Patent No. 6,232,254) was maintained from the Office Action of May 12, 2008.

The present claims are patentable over Dittmer at least for the following reasons.

Amended claim 1 recites, in part, that the regeneration step includes immersing the NO_x removal catalyst for 1 to 30 minutes without ultrasonic treatment at ambient temperature in regeneration water containing substantially no chlorine and no cleaning component and removing the catalyst from the regeneration water".

The present invention has been accomplished based on findings that the catalytic activity of a NO_x removal catalyst, particularly that of a NO_x removal catalyst which has been used with a NO_x removal apparatus for a flue gas from a boiler employing coal as a fuel, can be sufficiently restored by merely immersing the catalyst in pure water at ambient temperature, that the used catalyst regeneration water can be repeatedly used, and that the reused water can be treated in a comparatively simple manner by virtue of containing no heavy metals.

Furthermore, according to the present invention, an NO_x removal catalyst is immersed in regeneration water for about 1 to 30 minutes. During immersion, the catalyst is regenerated, without use of ultrasonic energy, but with bubble break-up action. Although, the immersion treatment according to the present invention may also be performed for 30 minutes or longer, this does not negatively affect the regeneration process.

In contrast, ultrasonic treatment is employed in Dittmer. If ultrasonic treatment as described in Dittmer is employed in the present invention, the honeycomb-structure of NO_x removal catalysts may be broken. Additionally, Dittmer requires a treatment time of 4 to 6 hours, unlike the treatment of 1 to 30 minutes of the present invention.

In view of the above, Applicants respectfully submit that claim 1 is patentable over Dittmer. Specifically, the prior art does not teach or suggest the feature of immersing the NOx removal catalyst for 1 to 30 minutes without ultrasonic treatment. Schneider does not cure the deficiencies in Dittmer. Therefore, claim 1 is also patentable over Dittmer in view of Schneider. Claims 2-11 are patentable over Dittmer individually, and in view of Schneider, at least by virtue of their dependence from claim 1.

Therefore, withdrawal of the foregoing § 103(a) rejection of claims 1-11 is respectfully requested.

(ii) The rejection of claims 12-15 under 35 U.S.C. § 103(a) as being unpatentable over Dittmer, optionally in view of Schneider as applied to claims 1-11, and further in view of Sueyoshi, et al. (JP 53-125964) was maintained.

Claims 12-15 are patentable over Dittmer, optionally in view of Schneider, at least by virtue of their dependence from claim 1. Sueyoshi does not cure the deficiency in Dittmer, or in the combination of Dittmer and Schneider.

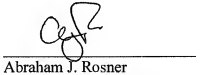
Therefore, withdrawal of the foregoing § 103(a) rejection of claims 12-15 based on Dittmer, optionally in view of Schneider, and in further view of Sueyoshi is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Abraham J. Rosner
Registration No. 33,276

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: February 20, 2009